

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Fig. 1. This sheet, which includes Fig. 1, replaces the original sheet including Fig. 1. Fig. 1 previously omitted labels for the illustrated block diagrams.

Attached: Replacement Sheet
 Annotated Sheet

REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1, 3-8, 10-17 and 21-25 are pending in this application.

Rejections Under 35 U.S.C. §103:

Claims 1, 5-8, 13-18, 21 and 22 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Van Renesse (U.S. '967) in view of Blair (U.S. '316). Claims 2 and 9 have been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Van Renesse and Blair, and further in view of Vleet (U.S. '803). Claim 19 was rejected under 35 U.S.C. §103 as allegedly being unpatentable over Van Renesse and Blair and further in view of Jackson. Claim 20 has been rejected under 35 U.S.C. §103 as allegedly being unpatentable over Van Renesse, Blair and Jackson and further in view of Vleet. Applicant traverses these rejections.

By this Amendment, the limitations of now-canceled dependent claims 2, 9 and 18-20 have been incorporated respectively into base independent claims 1, 8 and 17. Applicant traverses each of the above-rejections in light of the still-pending claims.

In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the prior art. Each of the above-noted combinations of references fails to teach or suggest all of the claim limitations. For example, each of the above-noted combinations of cited references fails to teach or suggest "processing the data therein to create an aggregated compressed data file, and transmitting the aggregated compressed data file to a plurality of similar relay devices, wherein the compression and aggregation technique applied to the data is a Bloom filter process. Similar (but not necessarily identical) comments apply to independent claims 8 and 17.

As acknowledged on page 5, line 29 *et seq.* of the original application, a Bloom filter is known in and of itself. For example, this portion of the original specification states “The ‘Bloom’ filter is a method for representing a set of elements such that queries can be made, and was first described by Burton H. Bloom in an article....” However, as further described on the sentence bridging pages 5 and 6 of the original specification, “Bloom filters have been used for a wide variety of uses from detection of IP address trails to subscription aggregation, but have not previously been used as an aggregation technique for event notification.”

Section 17 (page 6) of the Office Action admits that “Van Renesse and Blair ... do not expressly teach ‘wherein the compression and aggregation technique applied to the data is a Bloom filter process.’” Vleet discloses in Fig. 2 and paragraph [0055] a Bloom filter. However, while Bloom filters are known in the art in and of themselves (as discussed above in connection with the original specification), there is no teaching or suggestion in the prior art that data messages containing Bloom filters might be exchanged between data nodes in the information dissemination process required by claim 1.

As can be seen, for example, from paragraph [0055] of Vleet, the Bloom filters as discussed therein are generated and processed within individual servers 42 and 46. That is, there is no teaching or suggestion that they are used to compression and aggregate data passing from one node to another node. Instead, Vleet is concerned with event reporting in a central server, to record events such as an individual user’s access to individual URLs. As described in the sentence bridging pages 5-6 of the original specification, Bloom filters have not been previously used as an aggregation technique for event notification between relay devices. The application of Bloom filters in claim 1 is thus radically different from that disclosed by Vleet.

Again, Vleet discloses filters which are used to reduce memory in the central server, not being within transmissions between relay devices over a decentralized network. Accordingly, while Vleet discloses using the Bloom filter to reduce memory in a central server, there is no teaching or suggestion of utilizing the Bloom filter process in compressing and aggregating data files to be transmitted over a decentralized network.

None of the other cited references resolves the above-described deficiencies of Vleet in combination with Van Renesse and Blair. Accordingly, Applicant respectfully requests that the above-noted rejections under 35 U.S.C. §103 and all other rejections be withdrawn.

New Claims:

New claims 23-25 have been added. Claims 23, 24 and 25 depend from base independent claims 1, 8 and 17 and are thus deemed to be allowable at least for the reasons discussed above with respect to these base independent claims.

Conclusion:

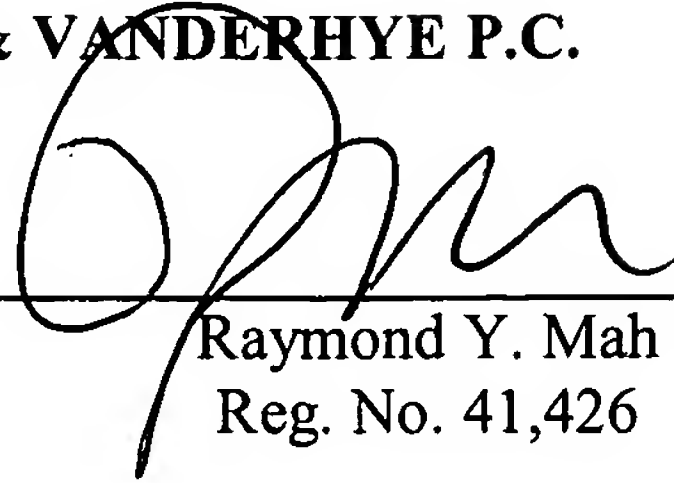
Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

NEKOVEE, et al.
Appl. No. 10/594,670
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Respectfully submitted,

NIXON & VANDERHYE P.C.

By: _____

A handwritten signature in black ink, appearing to be 'R. Mah', written over a horizontal line.

Raymond Y. Mah
Reg. No. 41,426

RYM:dmw
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100